Introduction

Few technological innovations have captured as much attention in recent years as electric drive vehicles (EDVs). To accommodate this major shift in our national transportation landscape, the standardization community needs to work together to support the establishment of effective and safe EDV technologies and infrastructure.

This two-day workshop will consider what codes, standards, and related conformity assessment programs are needed to facilitate the successful introduction and widespread acceptance and deployment of grid-connected light-, medium-, and heavy-duty EDVs. Additionally, gaps will be identified that challenge the widespread deployment of grid-connected EDVs, charging infrastructure, and support services. The workshop will consider current and future U.S. domestic, regional, and international standards, codes, conformity assessment activities, and education and training initiatives. It is being convened by the American National Standards Institute (ANSI) on behalf of the U.S. Department of Energy (DOE) and the Idaho National Laboratory.

On the first day of the workshop, participants will attend general sessions with high-level overviews of current work taking place and panel/audience discussions of what work remains to be done. Topics will include:

- The public-private partnership needed to help drive the market for EDVs
- U.S. DOE programs related to EDVs
- Current U.S.-based standards activities
- The international standards landscape
- Code, conformance, and training issues

The second day of the workshop will include interactive breakout session discussions focusing on standards for vehicles, infrastructure, and support services, as well as opportunities for collaboration and coordination. Participants will draw on their own personal knowledge as well as the overview information from day one to identify the issues, determine where there are gaps, and make recommendations for additional standards and programs that may be needed. All of this information will inform the development of a post-workshop report that ANSI will prepare for DOE.

Focus Questions and Worksheets

On day 2, each participant will be asked to attend one of three breakout sessions: vehicle, infrastructure, or support services/other. In order to make best use of participants’ time and maximize the beneficial
information offered to DOE, day 2 discussions will be structured via a sequence of specific focus questions. Since there may not be time for everyone to express their answers orally, you will be asked to record your answers to each question on the attached worksheets and to turn in your completed worksheets at the end of the session. This will ensure that all ideas are accounted for in the post-meeting report. Copies of the worksheets will be included in the registration packets provided at check in.

**Worksheet 1**

The focus question for this worksheet is:

*What are the standards issues of concern for the identified stakeholders?*

An “issue” is defined as a barrier or impediment to the successful introduction and widespread acceptance and deployment of light-, medium-, and heavy-duty on-road electric-drive vehicles (EDVs).

A “standards issue” is an issue that is related to deficiencies and/or inconsistencies in current codes, standards, or conformity assessment programs.

While many experts and DOE representatives have a strong familiarity with how standards and codes serve to support the introduction and acceptance of EDVs, the first worksheet asks you to assist in describing the issues of concern as they are perceived from the point of view of specific stakeholders. This will enable DOE to understand the key issues from each unique perspective before considering what actions to take.

This worksheet has three versions with each corresponding to a different grouping of stakeholders. The three versions of the worksheet are respectively labeled: Vehicle Group, Infrastructure Group, and Support Services/Other Group for each of the respective breakout sessions.

**Worksheet 2**

The focus question for this worksheet is:

*What standards and codes, conformance programs, and/or education programs are needed to address the key standards issues?*

In Worksheet 2, the focus shifts from issues to actions. DOE is interested in three types of actions that can address standards issues: (1) standards and codes, (2) conformance programs, and (3) education programs.

The assumption is that different standards issues require different types of action. New standards may be needed to address some issues, but for others standards may exist and the solution lies in better conformance programs. Still others may require education or a combination of different types of actions.

Worksheet 2 also asks whether you know any agency, group, or organization that has plans to implement the actions you have identified, and if so, what action they will take, and when. This information will help DOE avoid redundancy and duplication of effort.

Finally, Worksheet 2 asks you to identify opportunities for DOE to contribute directly and/or leverage the planned efforts of others.

**Worksheet 3**

The focus question for this worksheet is:

*What are the most important take-aways or messages for DOE?*

To close the breakout session process, Worksheet 3 provides you with an opportunity to highlight key points or ideas that you think DOE needs to hear, attend to, or take into consideration when setting priorities and planning actions.
Pre-Meeting Assignment

Please read through the work and begin to think about your answers to the focus questions. You may want to pre-write some of your answers on the attached worksheets and bring them with you to the workshop.

Please also note the different stakeholder populations listed on the different versions of Worksheet 1 and think about your first and second choice for the breakout group (Vehicle Group, Infrastructure Group, or Support Services/Others Group) you would like to be part of. Ideally, each breakout group will end up with about the same number of people.